

Appendix 2: Supplemental information [posted as supplied by author]

SAS code for the Cox model

```
PROC PHREG DATA=dataset1;
CLASS sex chronic hospital8m parents parity postalcode;
MODEL (ageDTP,ageout)*status (0)= mostrecentvaccine sex chronic hospital8m parents parity
birthweight maternalage gestationalage postalcode / RL;
IF (ageMMR=. OR ageout<ageMMR) then mostrecentvaccine=0.;
ELSE mostrecentvaccine=1.0;
STRATA dob;
RUN;
```

List of variables

AgeDTP	Age of receiving DTaP-IPV-Hib-4+PCV (days)
AgeMMR	Age of receiving MMR+MenC (days)
Ageout	Age at the end of follow-up (days)
Birthweight	Birth weight (grams)
Chronic	Chronic diseases (Y/N)
Dob	Date of birth
Gestationalage	Gestational age (days)
Hospital8m	Hospitalization for any reason at age 8 months (Y/N)
Mostrecentvaccine	Last-received vaccination (time-varying variable, changing at the age of receiving the MMR+MenC vaccine)
Parents	Parental country of birth (categorical)
Parity	Maternal parity (categorical)
Postalcode	Postal code (3 digits)
Sex	Sex (M/F)